



New York State Department of Environmental Conservation

MEMORANDUM

TO: Commissioner Flacke
 FROM: Mr. Hovey
 SUBJECT: Radioactivity in Niagara Falls
 DATE: May 24, 1979

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FJE
FCL
Rad. in Niagara Falls
area
Low

This summarizes the latest status of areas found with higher than normal radioactivity in Niagara Falls described in my memorandum of March 27, 1979. Except in one case, all of the areas with higher than normal background levels can be explained by natural radioactivity or the use of phosphate slag containing natural radioactivity for parking lots. There does not appear to be a significant problem with these areas because of the low occupancy factor and the radiation levels are only 2 to 7 times normal background.

The one exception is a large parking lot serving a bowling alley and an adjacent car agency. The lot is 25 to 50 times normal background. Levels range from 0.2 to 0.5 milliroentgens per hour (mr/hr). The Health Department has been evaluating the health hazard and to date has not taken a position that there is a violation of the code or there is a health hazard.

Today it was learned that the nursery room in the bowling alley has the highest levels of radiation within the building and that the Health Department is making an assessment of the health hazard. Since the nursery is occupied by children the Health Department may use 1/10th of the limits used for adults. It is possible that the Health Department may declare this a public health hazard.

Evidence to date indicates that the area was filled in with radioactive slag waste from a local industry in 1961. The slag was produced in the processing of ore to obtain niobium metal (also called columbium) which is not radioactive. The raw ore was high enough in natural uranium and thorium to require a license. A license was obtained by Union Carbide in 1961 from the old USAEC. A permit to bury the slag as radioactive waste was obtained in 1965 from the Health Department. Burials occurred from 1965 to 1972 including slag that was produced in 1961.

The responsibility of Union Carbide, if the slag fill did come from there, will be a legal matter. It may depend on when in 1961 Union Carbide became aware that a license was required. The ore was not being processed for nuclear fuel and they may not have initially recognized that a license and proper disposal were required.

cc: T. Cashman
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